

U.S. Appln. No. 09/899,767
Response and Amendment dated November 16, 2004
Reply to Advisory Action of November 9, 2004
Page 2 of 4

LISTING OF CLAIMS

This listing of claims will replace all prior versions, and listings of claims in the application:

1. (Currently Amended) A combinatorial screening apparatus comprising:
 - a) a cell body containing a fluid inlet;
 - b) a fluid permeable, conductive, catalyst array support positioned adjacent to the cell body, said catalyst array support having multiple locations for supporting solids and having a first side and a second side;
 - c) an independent catalyst mask positioned adjacent to the first side of the catalyst array support, said catalyst mask having material removed to form holes where the holes are in alignment with the multiple locations for supporting solids of the catalyst array support and thereby defining an unobstructed area above each location for supporting solids and masking the remainder of the catalyst array support; and
 - d) a cell cover positioned adjacent to the catalyst array support, said cell cover having material removed to allow for monitoring of the solids; and;
 - e) an excitation source in alignment with the cell cover wherein the excitation source is an ultraviolet radiation source.
2. (Original) The apparatus of Claim 1 further comprising a detector in alignment with the cell cover.

3. (Original) The apparatus of Claim 1 further comprising a diffuser positioned between the catalyst array support and fluid inlet of the cell body.
4. (Cancelled).
5. (Cancelled).
6. (Original) The apparatus of Claim 1 further comprising at least one fastener.
7. (Original) The apparatus of Claim 1 further comprising a seal between each of the elements a-d of Claim 1.
8. (Previously Presented) The apparatus of Claim 1 further comprising an independent reagent mask positioned between the cell body and the catalyst array support, adjacent to the second side of the catalyst array support, said reagent mask having

U.S. Appln. No. 09/899,767

Response and Amendment dated November 16, 2004

Reply to Advisory Action of November 9, 2004

Page 3 of 4

material removed to form holes where the holes are in alignment with the multiple locations for supporting solids of the catalyst array support and thereby defining a unobstructed area below each location for supporting solids and masking the remainder of the catalyst array support.

9. (Original) The apparatus of Claim 1 further comprising a diffuser located between the cell body and the catalyst array support.
10. (Original) The apparatus of Claim 1 wherein the catalyst array support is carbon paper.
11. (Cancelled).
12. (Original) The apparatus of Claim 1 wherein the cell body is further characterized in having a fluid outlet.
- 13.-32. Canceled
33. (Previously Presented) The apparatus of Claim 8 further comprising a diffuser located between the cell body and the reagent mask.
34. (Previously Presented) The apparatus of Claim 8 further comprising a seal between the cell body and the reagent mask; a seal between the reagent mask and the catalyst arrays support; a seal between the catalyst array support and the catalyst mask; and a seal between the catalyst mask and the cell cover.
35. (New) A combinatorial screening apparatus comprising:
 - a) a cell body containing a fluid inlet;
 - b) a fluid permeable, conductive, catalyst array support positioned adjacent to the cell body, said catalyst array support having multiple locations for supporting solids and having a first side and a second side;
 - c) an independent Plexiglas catalyst mask positioned adjacent to the first side of the catalyst array support, said catalyst mask having material removed to form holes where the holes are in alignment with the multiple locations for supporting solids of the catalyst array support and thereby defining an unobstructed area above each location for supporting solids and masking the remainder of the catalyst array support; and
 - d) a cell cover positioned adjacent to the catalyst array support, said cell cover having material removed to allow for monitoring of the solids